This listing of claims will replace all prior versions, and listings, of claims in the application.

What is claimed:

1. (Currently Amended) A method of treating patients who have diseases characterized bone loss comprising the step of administering to said patient an amount of TRANCE/RANK inhibitors effective to inhibit osteoclastogenesis and/or osteoclast function, wherein said TRANCE/RANK inhibitor is a compound having the Formula I wherein:

   R_1, and R_2 are, independently, selected from the group consisting of -H, - OCH_3, - CH_2CH_3, -*t*-butyl, 3-carboxy-4-chlorophenylamino, -N-$(CH_2CH_2OH)_2$, and -O(O)C-Ph;

   R_3 is selected from the group consisting of -H, ethyl, -OCH3, -C1, Br, F, 3carboxy-4 chlorophenylamino, -N-$(CH_2CH_2OH)_2$, -*t*-butyl, and -OC(O)-Ph, and is not limited to attachment at any certain position on the phenyl ring to which it is attached; and

   R_4 is selected from the group consisting of -Br,-Cl, and -F.

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2. (Cancelled) ~~The method of claim 1 wherein said TRANCE/RANK inhibitor is a compound having the Formula I wherein:~~

   ~~R_1, and R_2 are, independently, selected from the group consisting of -H, - OCH_3, - CH_2CH_3, -*t*-butyl, 3-carboxy-4-chlorophenylamino, -N-$(CH_2CH_2OH)_2$, and -O(O)C-Ph;~~

   ~~R_3 is selected from the group consisting of -H, ethyl, -OCH3, -C1, Br, F, 3carboxy-4 chlorophenylamino, -N-$(CH_2CH_2OH)_2$, -*t*-butyl, and -OC(O)-Ph, and is not limited to attachment at any certain position on the phenyl ring to which it is attached; and~~

   ~~R_4 is selected from the group consisting of -Br, Cl, and -F.~~

3. (Original) The method of claim 2 wherein R_3 is attached at either the 1 or 4 position of the 15 phenyl ring.

4. (Previously Presented) The method of claim 1 wherein said TRANCE/RANK inhibitor is a compound having the Formula I wherein:

R_1, R_2, and R_3 are $-OCH_3$, R_3 is attached at the 4 position, R_4 is -Cl;

R_1, and R_2 are methyl, R_3 is ethyl, attached at the 4 position, R_4 is -Cl;

R_1, and R_2 are $-OCH_3$, R_3 is -Cl, attached at the 2 position, R_4 is -Cl;

R_1, and R_2 are $-OCH_3$ and R_3 is H, R_4 is -Cl;

R_1, is H, R_2 and R_3 are 3-carboxy-4-chlorophenylamino, and R_3 is attached at the 4 position, R_4 is -Cl;

R_1 and R_2 are $-N(CH_2CH_2OH)_2$, R_3 is Cl, attached at the 4 position, R_4 is -Cl;

R_1, R_2, and R_3 are *t*-butyl, R_3 is attached at the 4 position, R_4 is -Cl;

R_1, is $-OCH_3$, R_2 and R_3 are H, R_4 is Cl; or

R_1, R_2, and R_3 are benzoate, R_3 is attached at the 4 position, R_4 is Br.

5. (Original) The method of claim 1 wherein said TRANCE/RANK inhibitor is selected from the group consisting I-A, I-B, I-C, I-D, I-E, I-F, I-G, I-H and I-I.

6. (Withdrawn) The method of claim 1 wherein said TRANCE/RANK inhibitor is a compound having the Formula II wherein:

R_1 is selected from the group consisting of –diphenylchloromethyl, -di(4chlorophenyl)chloro methyl, and 4-(diphenylchloromethy1)phenyl; and R_2, R_3, R_4 are
independently selected from the group consisting of -Br, -Cl, and -F.

7. (Withdrawn) The method of claim 6 wherein R_2, R_3, and R_4 are each -Cl.

8. (Withdrawn) The method of claim 1 wherein the TRANCE/RANK inhibitor is selected from the group consisting compounds II-A, II-B, II-C and II-D.

9. (Withdrawn) The method of claim 1 wherein said inhibitor is a compound having Formula III wherein:

R_1= $(NO_2)_2$,O(CO)CH3, OH, $O(CO)CH_3$, $O(CO)(CH_2)_2COOH$, $O(CO)CH_2Br$, $O(CO)CH_2Cl$, $O(CO)CH_2N(CH_3)_3$, or OC_sH_9O;

R2= $CH_2O(N0_2)$, CHO, $CH_2O(N0_2)$, CN, CH_3, COOH, CHNOH, $CH_2O(CO)(CH_2)_2COOH$, $CHN(NH)CONH_2$, $CHN(NH)C_6H_5$, $CHN(CH_2)C_6H_5$, $CH_2N(CH_2)_2OH$, $CH_2NC_6H_5$, or $CH_2N(NH)CSNH_2$;

R_3= OH, or H;

R_4= CH_3;

R_5= OH;

R_6 = $C_4H_3O_2$, $N(NHCO)C_6H_4Cl$, $N(NHCO)C_6H_4F$, COOH, O, $COCH_3$, $CH(CH_3)(CH_2)_2COOH$, $CH(CH_3)(CH_2)_2COOCH_3$, $O(CO)C_6H_5$, or OH;

R_7 = $O(CO)CH_2N(CH_3)_3$, or $O(CO)CH_3$;

R_8 = OH;

R_9 = O, or OH; and Rio = O

R_{10} = O.

10. (Withdrawn) The method of claim 1 wherein the inhibitor is selected from the group consisting compounds 111-1 to 111-31.

11. (Withdrawn) The method of claim 1 wherein said inhibitor is a compound having Formula IV wherein:

R1 = $O(CO)(CH_2)_2COOH$, or $O(CO)CH_2Br$; and

R2 = $O(CO)(CH_2)_2COOH$, or $O(CO)CH_2Br$.

12. (Withdrawn) The method of claim 1 wherein the inhibitor is selected from the group consisting compounds IV-1 and IV-2.

13. (Withdrawn) The method of claim 1 wherein said inhibitor is a compound having Formula V wherein:

R_1 = O, OH, or $O(CO)CH_3$;

R_2 = $O(CO)CH_3$, OH, $CO(CH_3)$, or $CO(CH_2)O(CO)CH_3$;

R_3 = CH_3, or OH; and

R_4 = $O(CO)CH_2C_6H_4I$, or CH_3.

14. (Withdrawn) The method of claim 1 wherein the inhibitor is selected from the group consisting compounds V-1 and V-5

15. (Withdrawn) The method of claim 1 wherein said inhibitor is a compound having Formula VI wherein:

R_1= $O(CO)CH_3$, OH, or $O(CO)(CH_2)_2COOH$;

$R_2 = CH_3$;

R_3 = O, or OH;

$R_4 = CH_3$

$R_5 = C_9H_{13}COCH_3$, $C_9H_{13}(CH_2CH_3)(CH_2OH)$, $C_9H_{13}(CH_3CH_3)(CH_2OOOCH_3)$, $C_9H_{13}(CH_2CH_2)(CH_2OCO(CH_2)_2COOH)$, $C_9H_{13}(CH_2CH_3)(COOH)$, or $C_8H_7O(CH_3)(C_4H_9OCH_3)$;

$R_6 = CH_3$;

R_7 = O, or H;

$R_8 = CH_3$;

$R_9 = (CH_3)_2$; and

R_{10} = Br.

16. (Withdrawn) The method of claim 1 wherein the inhibitor is selected from the group consisting compounds VI-1 and VI-11.

17. (Withdrawn) The method of claim 1 wherein the inhibitor is selected from the group consisting compounds VII, VIII, IX, X, XI and XII.

Claims 18-43: (Cancelled)